

GUMENYUK, V.S. (Kiev)

Basic frequency of free vibrations in plates with linear variations
of thickness. Prykl.mekh. 2 no.3:342-345 '56. (MIRA 9:10)
(Elastic plates and shells)

SOV/124-57-5-5893

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 125 (USSR)

AUTHOR: Gumenyuk, V. S.

TITLE: Approximate Calculation of Orthotropic Plates (Priblizhennyj
raschet ortotropnykh plastinok)

PERIODICAL: Sb. tr. In-ta stroit. mekhan. AN UkrSSR, 1946, Nr 21, pp 69-80

ABSTRACT: The author uses a grid method to determine the deflections of orthotropic plates. Examined first is the general case of an arbitrary Δ grid, then the case of a simplified grid comprised of equilateral, isosceles, or right triangles. The author examines the two cases wherein the plate edges are either simply supported or subjected to restraint. Examples are given of calculations of orthotropic plates having the respective shapes of an equilateral triangle, a rhombus (with a vertex angle of 90°), a trapezoid, and a rectangle. An error is noted in Figure 7, where the two points numbered 1 and the two points numbered 3 should lie at opposite angles of the parallelogram and not, as shown in the Figure, at adjacent angles.

G. G. Rostovtsev

Card 1/1

SOV/124-58-5-5728

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 115 (USSR)

AUTHOR: Gumenyuk V. S.

TITLE: Flexure of Square Plates of Varying Thickness (Izgib kvadratnykh plastinok peremennoy tolshchiny)

PERIODICAL: Inform. materialy. Inst stroit. mekhan. AN UkrSSR, 1957,
Nr 10, pp 57-62

ABSTRACT: By using the grid method an approximated solution is obtained for the problem of the transverse flexure of plates the thickness of which varies according to a specified linear law. Tables of influence numbers are given.

Résumé

1. Mathematics
2. Sheets--Elasticity
3. Elasticity--Theory

Card 1/1

VARVAK, P.M. (Kiev); VAYNBERG, D.V. (Kiev); CHUDNOVSKIY, V.G. [Chudnovs'kyi, V.H.] (Kiev); GUMENYUK, V.S. [Humeniuk, V.S.] (Kiev).

Experimental investigation of the strength of concrete blocks with apertures [in Ukrainian with summaries in Russian and English].
Prykl. mekh. 4 no.1:19-29 '58. (MIRA 11:4)

1. Institut budivel'noi mekhaniki AN URSR.
(Concrete blocks--Testing)

25(6)

SOV/119-59-6-6/18

AUTHORS: Butenko, A. N., Engineer, Gumenyuk, V. S., Engineer

TITLE: Testing of Wire With the Ultrasonic Detector of Defects
(Kontrol' provoloki ul'trazvukovym defektoskopom)

PERIODICAL: Priborostroyeniye, 1959, Nr 6, pp 16-17 (USSR)

ABSTRACT: Small machine parts and wire are difficult objects in ultrasonic detection of defects. Publications supply but scarce information on the subject. In some papers by the TsNIITMASH (Tsentral'nyy nauchno-issledovatel'skiy institut tyazhelogo mashinostroyeniya - Central Scientific Research Institute of Heavy Machinery) the smallest diameter mentioned is 15 mm. The authors describe a procedure of detecting defects introduced by themselves, based on the shadow method. With ultrasonics inciding perpendicularly to the axis the wire acts as a cylindrical acoustic dispersing lens in consequence of its cross section (Fig 1). However, since the dispersing effect depends on whether an error lies on the wire-end facing the sound or on the opposite one (in which case the dispersing effect is too weak to act upon the piezoreceiver), a differential method is applied, the diagram of which is shown in figure 2, and by which the wire tested is compared

Card 1/2

SOV/119-59-6-6/18

Testing of Wire With the Ultrasonic Detector of Defects

with a flawless standard sample. The method permits the testing of wire down to a diameter of 1 mm. The construction is graphically depicted in figure 3. The wire runs through with a velocity of from 50 to 100 m/h. Experiments showed that pressure points with a diameter of 0.8 mm, or scratches with a width of 0.1 mm as well as points of irregular hardness are determinable by the procedure under review. There are 3 figures.

Card 2/2

GURENOK, V.S. [A. S.] , V.S.]

Decision on a continuation action to conclude
"Soviet Union's military combativeness." (initial)
no likelihood.
(strength of materials)

GUMENYUK, V.S. [Humeniuk, V.S.]

Strength and plane stressed state of orthotropic plates.
Zbir.prats', Inst.mekh.AN URSR no.23:107-116 '61.
(MIRA 14:12)
(Elastic plates and shells)

GUMENYUK, E. A.

USSR/Miscellaneous - Technology

Card 1/1 : Pub. 12 - 9/12

Authors : Gumenyuk, E. A.

Title : Calculation of dimensions of conical dies for cold heading

Periodical : Avt. trakt. prom. 4, 27-29, Apr 1954

Abstract : The importance of proper calculation of dimensions of conical punch-dies, during the technological process of cold heading, is discussed. The calculation of dimensions of conical punch-dies consists in the correct determination of the dimensions of the punch-die cone in accordance with the volume of the metal consumed for the formation of the head. The basic dimensions of a conical punch-die are the diameter of the rod and length of its protruding part which determined the size of the head of the manufactured object. Tables; drawings.

Institution : The Stalin Auto Plant, Moscow

Submitted :

GUMENYUK, Ye.A.

Determining the dimensions of cold-upsetting die parts. Kuz.-
shtan.proizv. 1 no.12:18-21 D '59. (MIRA 13:4)
(Dies (Metalworking))

POPOV, V.A., kand. tekhn. nauk; MISOZHNIKOV, V.M., kand. tekhn.
nauk, retsenzent; NAVROTSKIY, G.A., kand. tekhn. nauk,
retsenzent; GUMENYUK, Ye.A., inzh., red.

[Equipment for automated cold upsetting processes] Osnastka
avtomatizirovannogo kholodnovysadochnogo proizvodstva. Mo-
skva, Mashinostroenie, 1965. 174 p. (MIRA 18:8)

BUZ'KO, V.M., peredova tkalya; GUMENYUK, Ye.I., peredova tkalya; DENI-
SENKO, L., veduchiy redaktor; VUYEK, M., tekhnichniy redaktor.

[The way to higher skill] Shliakh do vysokoi maisternosti.
Kyiv, Derzhavne vyd-vo Tekhn. lit-ry UkrSSR, 1954. 42 p.(MLRA 8:2)

1. Chernivets'kiy tekstil'niy kombinat (for Buz'ko, Gumenyuk)
(Weaving)

BELARUS, BREST, 1980. - A man trying to make a bomb, probably in an industrial plant.

Industrial espionage equipment at the Brest ceramic plant.
Photo taken on May 10, 1980. (KGB 1980)

1. Industrial espionage teacher, dissident scientist in the Institute of Construction
of Belarusian Energy Research Institute (for Brestopolskii, Khish). G. Litovskiy
was arrested by KGB (for Gennadyuk).

GUREN'YUK, Ye.L., inzh.; KRUSHEL', L.Ya., k. no. tekhn. rank; STEPANOVA, Ch.A.,
1978.

Possibility of expanding the supply of raw materials for the
production of faience tiles. Stek. i ker. 22 no.7:16-18 Jl
'65. (MIRA 18:9)

1. L'vovskiy keramicheskiy zavod (for Gurenyuk). 2. L'vovskiy
federal Gosudarstvennogo nauchno-issledovatel'skogo instituta
stroitel'stykh materialov i izdeliy (for Krushel', Stepanova).

YUZVENKO, Yu.A.; GUMENYUK, Yu.P.

Mechanized hard facing of streetcar rail heads. Avtom.svar. 15
no.5:68-72 My '62. (MIRA 15:4)

1. Ordnea Trudovogo Krasnogo Znameni Institut elektrosvarki
imeni Ye.O. Patona AN USSR.
(Hard facing--Equipment and supplies)
(Electric railroads--Rails)

ACCESSION NR: AP4009232

8/0125/64/000/001/0025/0027

AUTHOR: Istomin, Ye. I.; Gumenyuk, Yu. P.

TITLE: Welding vacuum-arc-melted and electron-beam-melted columbium

SOURCE: Avtomaticheskaya svarka, no. 1, 1964, 25-27

TOPIC TAGS: welding columbium, vacuum arc melted columbium, electron beam melted columbium, columbium weldability, argon arc welding, electron beam welding, columbium weld microstructure

ABSTRACT: An experimental study of the weldability of columbium and suitable welding methods is reported. Specimens 1-mm thick were butt-welded by an electron beam in a 2×10^{-5} torr vacuum with 45 ma at 20 kv, at a rate of 30 m/hr, weld width 1.5-1.8 mm. Other 1-mm thick specimens were argon-arc butt-welded with 140 amp, 10 v, 35 m hr, weld width 2.5-3.0 mm, by a 3-mm tungsten electrode. Both welds had a neat appearance, without undercuts or

Card 1/2

ACCESSION NR: AP4009282

oxidation stains. It was found that both types of columbium can be successfully welded by either electron-beam or argon-arc welding; the strength of the vacuum-arc-melted columbium exceeds that of the electron-beam columbium by 60 or 70 HV. Sheet vacuum-arc columbium should preferably be welded by the electron-beam method since argon-arc welding increases the impurity content and sharply reduces plasticity. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR
(Institute of Electric Welding, AN UkrSSR)

SUBMITTED: 04Feb63 DATE ACQ: 07Feb64 ENCL: 00

SUB CODE: ML NO REF Sov: 000 OTHER: 000

Card 2/2

L 58817-65 EAT(d)/EEC(k)-2/SED-2/EWP(1) Pg-4/Pg-4/Pk-4 IJP(c) GG/B3

ACCESSION NR: AR5000579

S/0271/64/000/009/BO37/BO37
681.142.67

39

12

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn. Sv. t., Abs. 9B219

AUTHOR: Gumenyuk-Sychevskiy, V. I.

TITLE: Moderate-high-speed elements¹⁶⁰ for formula computers and automatic devices

CITED SOURCE: Sb. Poluprovodnik. elementy. tsifr. vychisl. mashin malogo i sredn. bystrodeystviya. Kiyev, 1964, 26-42

TOPIC TAGS: computer, computer component, logical component

TRANSLATION: A set of matched impulse-potential moderate-high-speed elements is described which is sufficient for designing any logical circuit; the set has these advantages: noncritical transistors are used; diode, transistor, and other components matching is not absolutely necessary; a minimum number of wound components; absence of shaping circuits thanks to the low (0--15 kc) working frequency of the components; a rather high noise immunity of the input, output, and power-supply circuits. The set comprises a trigger, a pulse amplifier, a power-pulse amplifier, a potential NOR element, a delay circuit and a pulse

Card 1/5

L 58817-65

ACCESSION NR: AR5000579

generator. The components operate reliably and preserve their characteristics at ambient temperatures of 10–50°C and at a supply-voltage variation of $\pm 10\%$; the trigger ensures a single-digit binary addition. Its circuit comprises the trigger proper and an input logic. Three diode-capacitor gates are connected to each input of the trigger; they perform the function of logical multiplication; OR-diode trunks perform the function of logical addition. Structural and principal trigger circuits, trigger operation and characteristics are given. The pulse amplifier is a normally closed unit with a transformer-type input; it is used for power amplification of signals, suppression of noise, and restoration of pulse parameters. The amplifier inputs are equipped with a diode-capacitor logical circuit. The amplifier has no output transformer, which enhances its load capacity in feeding into the diode-capacitor gates and reduces its power consumption. No pulse-shaping circuit is used. The diode capacitor gate itself differentiates the amplifier pulse. A circuit of the pulse amplifier feeding into the gates, and its technical and amplitude-shaping characteristics are presented. The power-pulse amplifier is designed with two transistors, and does not differ from a single stage in its operation logic; its circuit diagram is supplied; type D9 diodes are used. As the steady-state resistance of these diodes has but little spread, and as the transient time is only 1/3–1/5-th of that of the working pulse front, the unmatched diodes are used. The potential NOR element

Card 2/3

L 58817-65

ACCESSION NR: AR5000579

consists of a 5-input potential OR circuit and a potential NOT inverter. An emitter follower is added to the inverter input to enhance its input resistance and load capacity. A principal potential-element circuit, equivalent circuits of its connection to the diode-capacitor gate and to the potential element, and technical characteristics of the element are given; the circuit operation is explained. Also the circuits of time delay units, the pulse generator, their technical characteristics, the decimal counter circuit and its states are given. It is noted that the above elements are well matched and can be recommended for designing small machines ("Fronin" type) intended for engineering calculations and for various automatic devices having moderate-high speeds. Twelve illustrations.

SUB CODE: DP

ENCL: 00

Card 3/3

YELSHIN, K.V.; SPEKTOR, I.B.; GUMEROV, A.G.

Evaporation losses of petroleum and petroleum products from tank farms of petroleum refineries and the measures for their substantial reduction. Trudy NIITransneft' no.1:240-246 '61. (MIRA 16:5)
(Evaporation control) (Tanks)

BEREZIN, V.L.; GUMEROV, A.G.; RASHCHEPKIN, K.Ye.

Performance of petroleum-plant tanks. Transp. i khran.
nefti no. 3:19-21 '63. (MIRA 17:?)

1. Ufimskiy neftyanoy institut i Nauchno-issledovatel'skiy
institut po transportu i khraneniyu nefti i nefteproduktov.

BEREZIN, V.L.; RASHCHEPKIN, K.Ye.; TIMERBAYEV, N.Sh.; YASIN, E.M.;
SULTANMIRATOV, Kh.F.; GUMEROV, A.G.; ZAKHAROV, I.Ya.

Experimental study of tension state of a pipeline during
capital repair. Izv. vys. ucheb. zav.; neft' i gaz 7 no.10;
89-91 '64. (MIRA 1812)

1. Ufimskiy neftyanoy institut.

RABINOVICH, R.I. Prinimali uchastiye: ALEGLAN, L.K., kand. sel'khoz. nauk; BARABANOVA, N.N.; BOSENKO, K.S.; VENNIK, V.V.; GRIGORCHUK, Ye.V.; GUMEROV, A.Kh.; DOBROCHASOV, D.F.; ZAMURAYEV, I.V.; ZAYTSEVA, A.G., kand. sel'khoz. nauk; KOL'TSOV, N.A.; LEVITIN, Kh.Z., kand. biol. nauk; LISITSKIY, B.Ya.; MATYASH, G.P.; MENTOV, A.V.; RABINOVICH, R.I.; SAL'NIKOV, V.V.; SVETCHNIKOV, I.V.; SIMONOV, P.K.; SMIRNOV, V.V.; SMIRNOV, L.P.; SMIRNOVA, V.I.; STEPANOVA, V.I.; TARASOV, A.A.; FILATOVICH, V.V., kand. sel'khoz. nauk; FEDOROV, N.G., kand. tekhn. nauk; TSAPLIN, M.F.; KHROMOV, L.V.; DAVYDOVA, I., red.; PAL'MINA, N., tekhn. red.

[Sverdlovsk in Agricultural Exhibition of 1959] Sverdlovskaya sel'-khoziaistvennaya vystavka. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1960. 131 p. (MIRA 14:10)

1. Sverdlovsk. Sverdlovskaya oblastnaya sel'skokhozyaystvennaya vystavka, 1959. (Sverdlovsk—Agricultural exhibitions)

GUMEROV, Kh.

How we achieve excellent indices. Den. i kred. 15 no.7:47-49
Jl '57. (MLRA 10:8)
(Ufa--Banks and banking)

GUMEROVA, M.Kh.; ARISTOVA, T.V.; GIL'MANOVA, R.G.; L'VOV, F.V.; BUKCHANTAYEVA,
M.S.; MUKHAMEDSHINA, M.A.; GAYNULLINA, N.M.; KHRAMOVA, N.P.;
KOBANOVA, I.N., red.; LABUDIN, N.T., red.; IBROGIMOVA, Z.A..
tekhn.red.

[Forty years of the Tatar A.S.S.R.; statistical collection]
Tatarskaya ASSR za 40 let; statisticheskii sbornik. Kazan'.
Tatarskoe knizhnoe izd-vo, 1960. 171 p. (MIRA 14:3)

1. Tatar A.S.S.R. Statisticheskoye upravleniye. 2. Nachal'nik
Statisticheskogo upravleniya Tatarskoy ASSR (for Kobanova).
(Tatar A.S.S.R.--Statistics)

GUMEROV, M. N.

436

Osnovy Ekonomiki sotsialisticheskogo sel'skogo khozyaystva. M., 1954. 20 sm.
(Glav. upi. podgotovki i kadrov M-va sel'skogo khozyaystva SSSR. Ussoyuz. Zaoch.
Uchetnyye Kursy VZUK). Bespl.
Ch. 2. 147s. 25,000 Ekz. (54-55315) P 338.1 (47)

SO: Knizhanaya, Letopis, Vol. 1, 1955

GUMEROV, M.N., dotsent

[Land resources of the U.S.S.R. and their use; a lecture] Zemel'nye
fondy SSSR i ikh ispol'zovanie; lektsiiia. Moskva, Moskovskaiia sel'-
skokhoziaistvennaia akademiia im. K.A.Timiriazeva, 1956. 30 p.
(Land) (Agriculture) (MLRA 9:11)

КУВШИНОВ, И.Н.
KUVSHINOV, Ivan Stepanovich, prof.; GUMEROV, M.N., dots.; LOVKOV, Ya.A.,
dots.; SULKOVSKAYA, M.A., red.; GOR'KOVA, Z.D., tekhn.red.

[Economics of socialist agriculture] Ekonomika sotsialisticheskogo
sel'skogo khoziaistva. Moskva, Gos. izd-vo sel'skokhoz. lit-ry,
1957. 400 p. (MIRA 11:4)
(Agriculture--Economic aspects)

KUVSHINOV, I.S., prof.; GUMEROV, M.N., dotsent; LOVKOV, Ya.A.,
dotsent; GREBTSOV, P.P., red.; ZUBRILINA, Z.P., tekhn.red.

[Economic aspects of socialist agriculture] Ekonomika
sotsialisticheskogo sel'skogo khozaiistva. Izd.2., perer. i
dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 429 p.
(MIRA 13:2)

(Agriculture--Economic aspects)

ACHARKAN, V.A.; BARSKOV, I.M.; BIRYUKOV, I.S.; BORODINA, L.Ya.; BRENNER, M.M.;
GORELIK, B.Ye.; GUMEROV, M.N.; ZOKAYA, N.M.; IOIYRISH, A.I.;
KAYDALOVA, O.N.; KAPUSTIN, Ye.I.; LEBEDEVA, M.A.; LESHKOVTSEV, V.A.;
LYSENKO, V.P.; MARKIN, A.B.; MIKHAYLOV, N.N.; NEST'YEV, I.V.; NECHAYEV,
N.V.; NIKOL'SKIY, A.V.; OSTROUKHOV, M.Ya.; PISARZHEVSKIY, O.N.;
POLUBOYARINOV, M.M.; POPOV, Yu.N.; PRASOLOV, M.A.; POKATAYEV, Yu.N.;
RIMBERG, A.M.; RYABOV, V.S.; SEMKOV, B.F.; SPERANSKAYA, Ye.A.; TAKOYEV,
K.F.; TRIFONOVA, G.K.; TROFIMOVA, V.I.; SHAKENAZAROV, G.Kh.; SHKAREN-
KOVA, G.P.; SHMERLING, K.G.; EYDEL'MAN, B.I.; MIKAELYAN, E.A., red.;
MUKHIN, Yu.A., tekhn.red.

[U.S.S.R. as it is; a popular illustrated handbook] SSSR kak on est';
populiarnyi illiustrirovannyi spravochnik. Moskva, Gos.izd-vo polit.
lit-ry, 1959. 462 p. (MIRA 12:2)

(Russia)

KUVSHINOV, I.S., prof.; GUMEROV, M.N., dots.

[Price and price formation of farm products; a lecture] T Sena
i tsenoobrazovanie na produkty sel'skogo khozaiistva; lektsiiia.
Moskva, Mosk. sel'khoz. akad. im. K.A.Timiriazeva, 1960. 87 p.
(MIRA 15:2)
(Farm produce--Prices)

BADIR'YAN, G.G., prof.; VASIL'YEV, N.V., prof.; KUTOV, G.G., prof.;
RUDAKOVA, Ye.A., prof.; BRAGINSKIY, B.I., doktor ekon.nauk;
GUMEROV, M.M., dots.; ROMANCHENKO, A.V., doktor ekon. nauk;
ABRAMOV, V.A., dots.; ALTAYSKIY, I.P., kand. ekon. nauk;
GAVRILOV, V.I., dots.; RAFIKOV, M.M., kand.ekon. nauk;
VINOKUR, R.D., dots.; RUSAKOV, G.K., dots.; LAVRENT'YEV,
V.N., dots.; GORELIK, L.Ya., red.; PONOMAREVA, A.A., tekhn.
red.

[Economics, organization and planning of agricultural production] Ekonomika, organizatsiya i planirovanie sel'skokhoziasistvennogo proizvodstva. Moskva, Ekonomizdat, 1963. 607 p.

(MIRA 16:11)

(Agriculture--Economic aspects)

L 31301-66 EWT(1)/T JK

ACC NR: AP6022591 (A,N) SOURCE CODE: UR/0346/66/000/001/0109/0111

AUTHOR: Kurochkin, V. I. (Candidate of medical sciences); Busygina, K. F. (Junior scientific collaborator); Gumerov, N. K. (Junior scientific collaborator); Nuriyev, G. G. (Junior scientific collaborator)

ORG: Kazan' Veterinary Institute (Kazanskiy veterinarnyy institut)

TITLE: Complement-fixing antibodies³⁸ in blood serum of rabbits immunized against foot-and-mouth disease^B

SOURCE: Veterinariya, no. 1, 1966, 109-111

TOPIC TAGS: antigen, antibody, blood serum, rabbit, foot and mouth disease, vaccine, immunization, gamma globulin

ABSTRACT: Complement-fixing antibodies were found in the sera of 11 rabbits immunized (subcutaneous inoculation in the spine and in one or all paws) with CNKI (State Scientific Control Institute) dry foot-and-mouth disease vaccine (Type O) by the complement fixation test in the cold. The strength of immunogenesis and the content of gamma-globulins in blood serum were greater with injection in the paw than in the spinal region; these phenomena indicate the important role of the lymph nodes in the synthesis of foot-and-mouth disease complement-fixing antibodies. The virus of the CNKI vaccine, in spite of its reduced virulence, retains complement-fixing activity, and the authors consequently conclude that the vaccine can be used as antigen in complement fixation. Orig. art. has: 1 table. /JPRS/

SUB CODE: 06 / SUBM DATE: none / OTH REF: 002 / OTH REF: 002

Card 1/1 CC

UDC: 619:616.988.43-097.37:636.92

0915 0608

FEDOTOV, Yekaterina Dmitriyevna; GUMEROVA, R.I., dots., red.;
KUSURGASHEV, I.M., red.

[Seasonal freezing of the soil in the Tatar A.S.S.R. and
adjacent areas in the middle Volga Valley] Sezonnoe pre-
merzanie pochvy v Tatarskoi ASSR i izmezhnykh oblastiakh
Srednego Povolzh'ia. Kazan', Izd-vo Kazanskogo univ., 1965.
198 p.
(MIRA 18:12)

GUMEROV, R.Kh.

Minimum weight pipeline. Trudy NIITransneft' no.l:276-286 '61.
(MIRA 16:5)
(Pipelines)

GUMEROV, R.Kh.; BUKHTEYEV, P.P.; SPIVAK, A.I.; IL'IN, N.G.

Analyzing methods for using drilling lines whose length is
greater than that of the line string-up in enterorises of
the Tuymazy Oil Well Drilling Trust. Burenie no.2:35-37 '65.

(MIRA 18:5)

1. Trest "Tuymazaburneft" i Ufimskiy neftyanoy institut.

GUMEROV, Raul' Medkhatovich; KOMAROVA, T.F., red.; ATROSHCHENKO, L.Ye.,
tekhn.red.

[New purchase prices and the collective farm economy] Novye
zakupochnye tseny i ekonomika kolkhozov. Moskva, Izd-vo "Znanie,"
1960. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniu politi-
cheskikh i nauchnykh znanii. Ser.3, Ekonomika, no.33).

(Collective farms) (Agricultural prices) (MIRA 13:11)

USATOV, I.A., kand. ekon. nauk; GUBIN, B.V., kand. ekon. nauk; SMIRNOV,
A.D., dots.; LAPTEV, Ye.N.; MOZHIN, V.P., kand.ekon.nauk;
GUMEROV, R.M.; KOVUNOV, S.N.; PSHENICHNYY, P.P.; MIAKOV, N.M.;
FILATOV, N.L.; FILIPPOVA, E.; red. izd-va; LEBEDEV, A., tekhn.
red.

[Economics and finance of socialist enterprises]Ekonomika i
finansy sotsialisticheskikh predpriatii. Moskva, Gosfinizdat,
1962. 404 p.
(Industrial management) (Finance) (MIRA 15:9)

NEDELIN, S.I.; GUMEROV, R.M.; KORYUNOV, S.N.; MOZHIN, V.P.; KOSYACHENKO, G.P., prof., red.; KONDRAT'YEVA, A., red.izd-va; LEBEDEV, A., tekhn. red.

[Collective farm monetary income and differential land rent]
Denezhnye dokhody kolkhozov i differentsiyal'naja renta. Mo-
skva, Gosfinizdat, 1963. 222 p. (MIRA 16:3)
1. Moscow. Nauchno-issledovatel'skiy finansovyy institut.
2. Otdeleniye finansov sel'skogo khozyaystva Nauchno-
issledovatel'skogo finansovogo instituta (for Nedelin,
Gumerov, Koryunov, Mozhin).

(Collective farms—Finance)
(Rent(Economic theory))

GUMEROV, Sh.A.

One example of the applicability of the Hamilton-Jacobi method
to nonholonomic conservative systems. Dokl.AN Uz.SSR no.11:
5-8 ' 58.
(MIRIA 11:12)

1. Tashkentskiy institut inzhenerov irrigatsii i mekhanizatsii
sel'skogo khozyaystva. Predstavлено akademikom AN UzSSR T.N.
Kary-Niyazovym.

(Functional analysis)

16(1)

AUTHOR: Gumerov, Sh.A. SOV/166-59-1-4/11

TITLE: On a New Formulation of the Conditions for the Application of the Hamilton - Jacobi Method for Nonholonomic Conservative Systems (O novoy formulirovke usloviy primenosti metoda Gamiltona - Yakobi dlya negolonomnykh konservativnykh sistem)

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1959, Nr 1, pp 31-44 (USSR)

ABSTRACT: The author generalizes and proves the results announced by I.S.Arzhanykh [Ref 1] on the conditions for the applicability of the Hamilton - Jacobi - method. Arzhanykh investigated nonholonomic systems with homogeneous kinetic potentials; the author extends the results to the nonhomogeneous potential

$$L = \frac{1}{2} \sum_{\nu=1}^n \sum_{\mu=1}^n a_{\nu\mu} \dot{q}_{\nu} \dot{q}_{\mu} + a_{\nu} \dot{q}_{\nu} + a,$$

where $a_{\nu\mu}$, a_{ν} , a are functions of the Lagrange coordinates q_{ν} .

Card 1/2

On a New Formulation of the Conditions for the
Application of the Hamilton - Jacobi - Method
for Nonholonomic Conservative Systems

SOV/166 59-1-4/11

(All calculations are carried out in detail. - Abstracter's note).
There are 2 Soviet references.

ASSOCIATION: Tashkentskiy institut inzhenerov irriatsii i mekhanizatsii
zemel'ogo khozyaistva (Tashkent Scientific Institute of Irrigation
and Mechanization of Agriculture)

SUBMITTED: March 22, 1958

Card 2/2

16(1),24(6)

AUTHOR: Gumerov, Sh.A...

06553

SOV/166-59-4-4/10

TITLE: On the Method of the Type of Hamilton-Jacobi for Motion
Equations of a Holonomic System Under Existence of Dissipative
Forces Proportional to the Impulses

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-
matematicheskikh nauk, 1959, Nr 4, pp 26-33 (USSR)

ABSTRACT: The author considers the holonomic dynamic system with the
kinetic energy

$$(1) \quad T = \frac{1}{2} \sum_{v=1}^n \sum_{m=1}^n a_{vm} q_v \dot{q}_m,$$

which moves under the influence of forces proportional to the
impulses

$$(2) \quad Q_v = -k \frac{\partial T}{\partial \dot{q}_v}, \quad k=\text{const.}$$

I.S.Arzhanykh [Ref 1] has shown that to these systems the
integration method of Hamilton-Jacobi can be applied. The
author proposes a substitution which simplifies this method

Card 1/2

On the Method of the Type of Hamilton-Jacobi for Motion Equations of a Holonomic System Under Existence of Dissipative Forces Proportional to the Impulses

06553

SOV/166-59-4-4/10

in the considered case, and besides he gives an example.
There is 1 Soviet reference.

ASSOCIATION: Tashkentskiy institut inzhenerov irrigatsii i mekhanizatsii sel'skogo khozyaystva (Tashkent Institute of Engineers for Irrigation and Mechanization of Agriculture)

SUBMITTED: January 27, 1959

Card 2/2

GUMEROV, Sh.A.

Integration of equations for the motion of systems moving under
the effect of forces linearly dependent on velocity. Izv. AN
Uz.SSR.Ser.fiz.-mat.nauk no.6:5-13 '59. (MIRA 13:6)

1. Tashkentskiy institut inzhenerov irrigatsii i mekhanizatsii
sel'skogo khozyaystva.
(Motion)

ARZHANYKH, I.S.; QUMEROV, Sh.A.

Conditions governing the applicability of a potential method for integrating equations for the motion of nonhomologous systems in a case where the Hamilton function clearly depends on time. Dokl. AN Uz.SSR no.10:3-6 '59
(MIR 13:3)

1. Institut mekhaniki AN UzSSR i Institut inzhenerov irrigatsii i mekhanizatsii sel'skogo khozyaystva. Predstavлено akademikom AN UzSSR T.N. Kary-Niyazovym.
(Differential equations)

GUMAROV, ShA. Cand Phys-Math Sci -- (diss) "On a Potential Method
of Integrating Certain Differential Equations of Analytic Dynamics,"
Tashkent, 1960, 20 pp, 150 copies (Tashkent Institute of Engineers of
Irrigation and Agricultural Mechanization) (KL, 46/60, 122-123)

GUMEROV, Sh. A.

ARZHANYKH, I. S., and GUMEROV, Sh. A.

"Conditions for use of a method of the Hamilton-Jacobi type for integrating
equations of motion of nonholonomic conservative systems"

Report presented at the Conference on Applied Stability-of-Motion Theory and
Analytical Mechanics, Kazan Aviation Institute, 6-8 December 1962

, 4100

32215

S/140/62/000/004/003/009
C111/0333

AUTHOR: Gumerov, Sh. A.

TITLE: On the integration of the equations of the Hamilton-Jacobi type by aid of the separation of the variables

PERIODICAL: Vysshiiye uchebnyye zavedeniya. Izvestiya. Matematika, no. 4, 1962, 49-61

TEXT: First of all the author considers a mechanical system the coordinates of which can be separated in groups $(\varphi_1, \varphi_2, \dots, \varphi_n)$, $(\theta_1, \theta_2, \dots, \theta_n)$ such that one can write down the kinetic energy in the form

$$T = \frac{1}{2} Q \left(\frac{1}{\sum_{\varphi}} + \frac{1}{\sum_{\psi}} + \dots + \frac{1}{\sum_{\theta}} \right) \quad (27)$$

where $n_1 + n_2 + \dots + n_\lambda = n$; $Q = Q_{\varphi}(\varphi_1, \dots, \varphi_{n_1}) + \dots + Q_{\theta}(\theta_1, \dots, \theta_{n_\lambda})$;

$$\sum_{\varphi} = \sum_{v=1}^{n_1} A_{vv}(\varphi_1, \dots, \varphi_{n_1}) \dot{\varphi}_v \dot{\varphi}_{v+1}, \dots, \sum_{\theta} = \sum_{\sigma=1}^{n_\lambda} S_{\sigma\sigma}(\theta_1, \dots, \theta_{n_\lambda}) \dot{\theta}_\sigma \dot{\theta}_{\sigma+1}$$

On the integration of the equations ... S/140/62/000/004/003/009
C111/C333

$$\Omega_\varphi = 1 + c_1(Q - Q_\varphi) - c_2 Q_\psi - \dots - c_\lambda Q_\theta \dots$$

$\Omega_\theta = 1 - c_1 Q_\varphi - c_2 Q_\psi - \dots + c_\lambda (Q - Q_\theta)$. The system moves under the influence of resistance forces which are proportional to impulses. It is shown that it is sufficient for the integration of the motion equations, to determine the complete integrals of the partial differential equations

$$\sum_{\nu=1}^{1,n} A_{\xi\nu}^+ \frac{\partial \xi_\rho}{\partial Y_\nu} \frac{\partial \xi_\rho}{\partial Y_\mu} = h_0 Q_\varphi + h_\varphi$$

.....

$$\sum_{\sigma,\xi}^{1,n} S_{\xi\sigma}^+ \frac{\partial \xi_\rho}{\partial \theta_\sigma} \frac{\partial \xi_\rho}{\partial \theta_\xi} = h_0 Q_\theta + h_\theta$$

Card 2/4

On the integration of the equations ... S/140/62/000/004/003/009
C111/C333

where $A_{uv}^*, \dots, S_{\beta\theta}^*$ are inverse to the matrices $A_{vu}, \dots, S_{\theta\beta}$,
while $h_0, h_\varphi, \dots, h_\theta$ are arbitrary constants, $h_\varphi + \dots + h_\theta = 0$, and
besides the solutions ξ_1, \dots, ξ_θ contain $n_1 - 1, \dots, n_\lambda - 1$
arbitrary constants.

For the second one generalises the Stöckel integration case: The coordinates q_1, \dots, q_n decompose as above in λ different large groups such

$$T = \frac{1}{2} D \left(\frac{1}{\Delta_\varphi} \sum_{\varphi} + \frac{1}{\Delta_\psi} \sum_{\psi} + \dots + \frac{1}{\Delta_\theta} \sum_{\theta} \right). \quad (38)$$

where $\sum_{\varphi}, \dots, \sum_{\theta}$ are the same as above, while

Card 3/4

On the integration of the equations ...

S/140/62/000/004/003/009
C111/C333

$$D = \begin{vmatrix} A_1 & A_2 & \cdots & A_\lambda \\ B_1 & B_2 & \cdots & B_\lambda \\ \cdots & \cdots & \cdots & \cdots \\ S_1 & S_2 & \cdots & S_\lambda \end{vmatrix} \quad \begin{aligned} A_i &= A_i(\varphi_1, \varphi_2, \dots, \varphi_n) \\ B_i &= B_i(\varphi_1, \varphi_2, \dots, \varphi_n) \\ S_i &= S_i(\theta_1, \theta_2, \dots, \theta_n) \end{aligned}$$

and the determinants $\Delta_\varphi, \Delta_\varphi, \dots, \Delta_\varphi$ are obtained out of D by substituting the first, second, ..., last row by $c_1, c_2, \dots, c_\lambda$. The forces are the same as above. It is shown that it is sufficient for the solution of the motion equations to solve a certain system of partial differential equations.

ASSOCIATION: Tashkentskiy institut irrigatsii i mekhanizatsii sel'skogo khozyaystva (Tashkent Institute for Irrigation and Mechanisation of the Agriculture)

SUBMITTED: July 15, 1959

Card 4/4

L 61526-65 ENT(d) IJP(c)

ACCESSION NR: AR5016486

UR/0124/65/000/006/1006/1006

SOURCE: Ref. zh. Mekhanika, Abs. 6A37

AUTHORS: Arzhanykh, I. S.; Gumerov, Sh. A.

TITLE: On the conditions of partial applicability of the Hamilton-Jacobi type method to integrating the equations of motion for nonholonomic conservative systems

CITED SOURCE: Tr. Mezhvuz. konferentsii po prikl. teorii ustoychivosti dvizheniya i analit. mekhan., 1962. Kazan', 1964, 31-37

TOPIC TAGS: nonholonomic system, motion equation, mechanical system, Hamilton Jacobi method

TRANSLATION: The concept of the potential method of integrating the motion equations of mechanical systems is introduced. The possibilities of applying this method to nonholonomic systems is analyzed. It is determined that the method is not applicable to the general case of nonholonomic systems. V. I. Kirgetov

SUB CODE: MA

ENCL: 00

Card 1/1dm

S/065/60/000/006/007/008/XX
E194/E484

AUTHORS: Cherednichenko, G.I., Telyashev, G.G. and Gumerov, Z.Z.
TITLE: The Production of Feed Stock for the Manufacture of
Transformer Oil //

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1960, No.6,
pp.24-28

TEXT: A group of workers of the Novo-Ufimskiy Refinery have developed and successfully introduced a method of producing narrow cut distillate suitable for the production of transformer oil and which affords the possibility of producing low viscosity oils // grades MC-8 (MS-8) and MC-6 (MS-6). The method of producing transformer oil distillate that was initially used is described. Characteristics of the distillates obtained are given in Table 1 and it will be seen that none of them meet the requirements applicable to transformer oils distillate, which are also given. The distillate was a very broad cut and the yield was low. The refinery then began to manufacture transformer oil feed stock by secondary distillation, the procedure used is described and a schematic diagram of the scheme is shown in Fig.1. With this method the yield was 45 to 55% of the feed stock, the production of the column had to be restricted to 240 tons per day, the quality of Card 173

S/065/60/000/006/007/008/xx
E194/E484

The Production of Feed Stock for the Manufacture of Transformer Oil

the transformer oil distillate was satisfactory but its quantity inadequate. Investigations showed that the upper parts of the first vacuum distillation column were not adequately used and attempts were made to improve the situation both by delivering steam to the lower part of the vacuum column and by raising the inlet temperature of the feed to 415 to 420°C, but good results were not obtained. A new method was then proposed using the circuit shown in Fig.2 in which the topped crude feed was enriched with 300 to 400°C fractions. For this purpose excess of the first oil fraction was used to wash the gas oil trays of the atmospheric distillation column. Conditions became suitable for more complete extraction of the diesel fuel fractions. The quality and fractional composition of the second fraction were stabilized and the flash point raised, the properties of the second fraction are given. In order to obtain transformer oil distillate of suitable viscosity it was necessary to reduce the end boiling point of the diesel fuel. In this way fully satisfactory transformer oil distillate was obtained. At present two plants are using the circuit of Fig.2, satisfactory transformer oil is being

✓

Card 2/3

S/065/60/000/006/007/008/XX
E194/E484

The Production of Feed Stock for the Manufacture of Transformer Oil manufactured and an experimental batch of oil grade MS-8 is being produced. The quality of the transformer oil distillate is easily adjusted by altering the final boiling point of the diesel fuel. There are 2 figures and 2 tables.

ASSOCIATION: NU NPZ

Card 3/3

IVANOV, N.V.; GUMEROV, Z.Z.

Organization of preliminary inspection. Bezop. truda v prom.
8 no.10:27-28 0 '64. (MIRA 17:11)

1. Upravleniye Ufimskogo okruga Gosudarstvennogo komiteta pri Sovete
Ministrov RSFSR po nadzoru za bezopasnym vedeniyem rabot v promy-
shlennosti i gornomu nadzoru.

SOV-2-58-8-8/12

AUTHOR: Gumerova, M., Section Chief

TITLE: From the Practice of Compiling Territorial Balance Sheets
of the Population's Income and Expenditure (Iz praktiki
sostavleniya territorial'nykh balansov denezhnykh dokhodov
i raskhodov naseleniya)

PERIODICAL: Vestnik statistiki, 1958, Nr 8, pp 66 - 68 (USSR)

ABSTRACT: Since 1956, the statistical administrations of the Union
and of the autonomous republics, krays and oblast' have
been compiling balance sheets of the peoples' income and
expenditures. They are of great significance for planning
the retail turnover of goods and money circulation on a
territory basis, but the work is of a specific character
and more difficult than compilation of balance sheets
covering the entire country. The difficulty is due to the
fact that some of the republics, krays, etc., being a part

Card 1/2

GUMEROVA, R. I.

"Moisture Cycle of Soils of the TASSR." Cand Geog Sci, Kazan' State U imeni V. I. Ul'yanov-Lenin, Kazan', 1955. (KL, No 18, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 100 (USSR) 14-57-7-14825

AUTHOR: Gumerova, R. I.

TITLE: Moisture Content of the Soil in Tataria During the
Warm Season (O zapasakh vлаги v pochve na territorii
Tatarii v teplyy period goda)

PERIODICAL: Uch. zap. Kazansk. un-ta, 1956, Vol 116, Nr 3,
pp 141-194

ABSTRACT: This article describes the geographical distribution
of moisture in the soils of Tataria and explains how
this distribution is influenced by the soil and cli-
matic characteristics in various regions of this area.
In spring the soils of Tataria are seldom saturated
with moisture, and none of them can be considered as
being wet. Nevertheless, the first period (which
includes the sowing season) enjoys a near-optimum

Card 1/2

14-57-7-14825

Moisture Content of the Soil in Tataria (Cont.)

moisture content of the upper (plowed) layer, according to data supplied by the stations of Bugulma, Menzelinsk, Kazan, Opornaya, and Chuipanovo, all of which (except the last one) enjoy sufficient amounts of moisture. The trans-Kama district lies wholly in an insufficient moisture zone. The Yelabuga and Tetyushki stations observed that moisture increases with depth. This creates conditions entirely suitable for crops in their growing and flowering stages. It was observed that the soils definitely lacked moisture during dry years, but this was seldom true at all stations at any one time. A bibliography of 16 titles is included.

Card 272

G. D.

GUMERSKIY, K.H.G.

AID P - 2107

Subject : USSR/Chemistry

Card 1/1 Pub. 78 - 20/24

Author : Gumerskiy, Kh. G.

Title : Efficiency analysts are speeding the fulfillment of the Five-Year Plan

Periodical: Neft. khoz., v.33, no.4, 89-91, Ap 1955

Abstract : The article lists a number of improvements which efficiency analysts have introduced in the oil-processing plant in Ishimbai.

Institution: None

Submitted : No date

GUMENNY, M.

Chemical hardening of molds.

p. 102 (Mechanika. No. 2, 1956. Wroclaw, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1956

GUMIETY, H.; ST LARSKI, M.; BYDALEK, A.

Hardening of molds and cores with carbon dioxide. p. 161.

(PRZEWGLAD ODLEWMICTWA. Vol. 7, No. 6, June 1957, Krakow, Poland.)

SO: Monthly List of East European Accessions (FEAL) Ic. Vol. 6, No. 10, October 1957. Uncl.

30(2)

SCV/12-91-1-2/22

AUTHOR: Gumilev, L.N.

TITLE: The Ting-ling Problem - A Review of the Hypotheses of G.Ye. Grumm-Grzhimaylo in the Light of New Historical and Archaeological Material (Dinlinskaya problema - Peresmotr gipotezy G.Ye. Grumm-Grzhimaylo v svete novykh istoricheskikh i arkheologicheskikh materialov)

PERIODICAL: Izvestiya Vsesoyuznogo geograficheskogo obshchestva, Vol 91, Nr 1, pp 17-26 (USSR)

ABSTRACT: The hypothesis of G.Ye. Grumm-Grzhimaylo on the existence of a Europoid native population in Central Asia in the 10th century A.D. was confirmed by archaeological data from the USSR territory as well as by new historical information on China. The South Siberian dolichocephalic (Ting-ling) and the North Chinese brachycephalic (Ti) races are related in the second degree, both of Europoid origin. The direct connection between Europeans and Ting-ling came to an end in the paleolithic era. In the 12th century, the descendants of the ting-ling, the Yenisei Kirghiz, were absorbed by Mongolian tribes from the south, and by Ugrian tribes from the north.

Card 1/2

SOV/12-71-1-2/22

The Dinlin Problem - A Review of the Hypotheses of G.Ye. Grumm-Grzhimaylo
in the Light of New Historical nad Archaeological Material

In the 11th century, the descendants of the **Jung-ti** partially mixed with the ancient Chinese population and partially assimilated with the eastern Tibetans, thus forming the Tangut tribes. The steppe **Ting-ling** mixed with the Huns, thus bringing several Europoid features into the race, the steppe **Ti**, **Wu-sun** and **Te'le** assimilated with Mongolian tribes in the 9th - 12th centuries. All research into the history and ethnogeny of Central Asian tribes must consider Grumm-Grzhimaylo's findings.

Card 2/2

KOZLOV, Petr Kuz'mich. (1863-1935); Prin. uchastiye: GORBACHEVA, Z. I.;
GUMILEV, L.N., red.; KOZLOV, V.P., red.; KOZLOVA-
PUSHKAREVA, Ye.V., red.; MURZAYEV, E.M., red.;
OVCHINNIKOVA, T.N., red.; SINITSYN, V.M., red.;
YUNATOV, A.A., red.; SPRYGINA, L.I., red. izd-va;
VOLKOVA, V.V., tekhn. red.

[A Russian traveller in Central Asia] Russkii puteshestven-
nik v TSentral'noi Azii; izbrannye trudy (k stoletiiu so-
dnia rozhdeniya, 1863-1963). Moskva, Izd-vo AN SSSR, 1963.
522 p. (MIRA 16:10)

(Kozlov, Petr Kuz'mich, 1863-1935)
(Asia, Central--Discovery and exploration)

GUMILAEV, L. N.

Khazaria and the Caspian; landscape and ethnogeny, No. .
Vest LGU 19 no. 6:83-95 '64. (MIRA 17:5)

GUMILEV, L.N.

Concerning the subject of historical geography (landforms and
ethnos). Part 3. Vest. LGU 20 no.18 '65 Seria geologii i geografi
no.3:112-120 (MIRA 18:10)

GUMILEV, L.N.

G.E. Grum-Grzhimailo as a historian of the Mongolian and
Kalmyk peoples. Izv. Vses. Geog. ob-va 97 no.5:445-447
S-O '65. (MIRA 18:11)

GAYEL', A.G.; GUMILEV, L.N.

Uneven-aged soils on the steppe sands of the Don Valley and
the migration of peoples during the period of recorded history.
Izv. AN SSSR Ser. geog. no. 1:11-20 Ja F '66 (MIRA 19:2)

1. Moskovskiy gosudarstvennyy universitet i Leningradskiy gosu-
darstvennyy universitet imeni A.A. Zhdanova.

GUMILEVA, M.G., inzh.

Scientific and technical conference on the theory and practice of
burning gas at power plants and in industrial boilers. Teplo-
energetika 7 no.6:93-94 Je '60. (MIRA 13:8)
(Gas as fuel)

MOSKALENKO, Ol'ga Yakovlevna; GUMILEVA, Margarita Vasil'yevna; NOVIKOV, K.P.,
otvetstvennyy redaktor; DMITRIYeva, L.N., redaktor izdatel'stva;
ZAZUL'SKAYA, V.F., tekhnicheskiy redaktor

[Abbau; a text book in German language] Abbau; uchebnoe posobie po
nemetskому iazyku. Moskva, Ugletekhizdat, 1956. 179 p. (MLRA 10:1)
(Coal mines and mining--Terminology)
(German language--Chrestomathies and readers)

7(6)

AUTHORS:

Gumilevskaya, G. P., Soboleva, A. D.

SOV/32-25-2-28/78

TITLE:

The Determination of the Annealing Period of Molding Powder
After the End of Luminescence (Oprudeleniye dlitel'nosti
prokalivaniya pressaporoshkov po ischezneniyu lyuminests-
sentsii)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2,
pp 182 - 184 (USSR)

ABSTRACT:

The properties of molding powders for coal electrodes are due to the annealing process; the amount of volatile components is proportionate to that of the binding substance. Annealing is done in a muffle furnace at $820 \pm 20^\circ$ for 30 minutes. A "short-cut" method is described in the present paper. The criterion for the volatile substance content is their luminescence. When irradiated with ultraviolet rays malthenes exhibit yellow-amber, asphaltenes dark brown luminescence, while carbenes do not luminesce at all. The time required for complete calcination is marked by the moment when luminescence of the coke residue ceases. The luminescence was determined on an apparatus (Fig) with a PRK-2 lamp.

Card 1/2

The Determination of the Annealing Period of Molding
Powder After the End of Luminescence

SOV/32-25-2-28/73

Molding powder made of a soot-pitch mixture Nr 1 was examined, annealing being carried out at $820 \pm 20^\circ$ for 5, 10, 20 and 30 minutes (Table 1). Reference analyses were carried out in two laboratories by laboratory workers Girina, Kolkina and Timakova. Maximum deviations amounted to 4.8%, the mean square deviation to 3.8-3.6% (Table 2). It was found that with an optimum annealing period of 10 minutes the accuracy of determination is increased by the use of a crucible support (suggested by A. V. Kuznetsova). There are 1 figure, 2 tables and 1 Soviet reference.

Card 2/2

FIALKOV, A.S.; GUMILEVSKAYA, G.P.; GRINBERG, M.B.

Modification in the binder in the first stage of sintering
of carbon-graphitic materials. Zhur.prikl.khim. 35 no.10:
2308-2313 O '62. (MIRA 15:12)
(BINDING MATERIALS) (GRAPHITE)

L16189-65 EWG(j)/EMP(e)/EWT(m)/EPF(c)/EPR/EMP(j)/T-2/EMP(b) PC-4/pr-4/
PS-4 WW/RM/WH

ACCESSION NR: AP4045193

S/0080/64/037/009/1994/2003

AUTHORS: Fialkov, A.S.; Gumilevskaya, G.P.; Ogareva, N.N.

TITLE: Investigation of the distribution of pores according to their dimensions in coke-binder compositions. Communication II in a series of investigations on the forming of pore structures in carbon-graphitized materials.

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 9, 1964, 1994-2003

TOPIC TAGS: coke, coke binder composition, coke pitch composition, pore formation, pore size distribution, petroleum coke, pitch coke, intermediate size pore, macropore, linear thermal expansion

ABSTRACT: The relationship between pore size distribution and conditions under which they were formed in coke-pitch compositions was investigated. The cracked petroleum coke had been treated at 1500-3000°C in an electric resistance furnace; the pyrolyzed petroleum coke and the pitch coke powders were heated to 1300°C. The coke powders were then mixed at 1250°C with 30-40 vol.% of coal tar pitch, the 10-0 micron fraction was compressed at 2000 kg/cm², heated at 950°C and graphitized at 2800°C. The distribution of intermediate (about 40-

L 16189-65
ACCESSION NR: AP4045193

200Å) and macro pores (over 200Å), was determined. The pyrolysed petroleum coke had a much greater volume of intermediate pores and significantly smaller volume of macropores than cracked petroleum coke. Graphitized coke-pitch compositions had both mono- and poly-dispersed (mostly bidisperser) pore structures. By increasing the amount of binder and increasing the dimensions of the coke particles, the pore structure was changed to the monodispersed. Heat treating the coke caused a very rapid increase in the specific volume of macropores and in the absolute value of the maximum of their distribution in comparison to the uncalcined coke. In the uncalcined coke the components settled, reducing the volume and dimensions of the macropores. The linear thermal expansion of the uncalcined cokes was higher than that of the heat treated cokes. The distribution of the specific volumes of intermediate and macro pores in coke-pitch compositions was regulated to some extent by changing the temperature to which the coke powders had been heated. Graphitizing of coke-pitch samples increased their open porosity while reducing the closed porosity. Orig. art. has: 9 figures, 1 table and 7 equations.

ASSOCIATION: None

Card 2/3

L 16189-65
ACCESSION NR: AP4045193

SUBMITTED: 01 Oct 62

SUB CODE: MT

NR REF SOV: 008

ENCL: 00

OTHER: 003

Card

3/3

ACCESSION NR: AP4047984

S/0076/64/038/010/2455/2462

AUTHOR: Fialkov, A. S.; Gumilevskaya, G. P.; Chekanova, V. D.; Smirnov, B. N.;
Ogareva, N. N.; Petukhova, R. P.

TITLE: The dependence of the change of pore structure of petroleum cokes on
coking temperature B

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 10, 1964, 2455-2462

TOPIC TAGS: petroleum coke, pore structure, coking temperature, pore dimension

ABSTRACT: The change in the structure of the pores in petroleum coke coked at temperatures in the 600-3000C range was investigated. The total pore volume increased on increasing the coking temperature, and the relationship between the macropore and intermediate pore volume and the pore configuration changed. The total volume of micro and intermediate pores, which was minimum at coking temperatures of ~1200C, did not change with increasing temperature as fast as the total pore volume. Electron microscope studies confirmed that micropores

Card 1/2

ACCESSION NR: AP4047984

of 20-50 Å radius and intermediate channel-shaped pores of 100-200 Å radius existed in the petroleum coke. On coking to 1300C the dimensions of the macropores increased to 100 Å. The pore structure changed at 2900-3000C, the coke particles acquired a lamellar character and contained no micropores. The formation of the porous structure of the coke depended on gas evolution and on the two and three-dimensional orderliness of the coke material. Orig. art. has: 4 figures and 2 tables

ASSOCIATION: None

SUBMITTED: 25Aug63

ENCL: 00

SUB CODE: FP, MT

NO REF SOV: 007

OTHER: 002

Card 2/2

L 32075-65 EPG(j)/EMP(e)/EMT(m)/EFF(c)/EPR/ESP(b) Pr-d/Ps-h Wk/MIH

ACCESSION NR: AP5005575

S/0080/65/038/002/0445/0448

AUTHOR: Fialkov, A. S.; Gumilevskaya, G. P.; Ogareva, N. N.

TITLE: Control of the porous structure in carbon black-pitch compositions.

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 2, 1965, 445-448

TOPIC TAGS: carbon black composition, graphitized carbon, pitch composition, lamp black, coal tar pitch, composition porosity

ABSTRACT: In continuation of previous work on the formation of porous structures in graphitized carbon materials the authors studied the dependence of porous structures of lampblack-coal tar pitch compositions experimentally in order to prove the possibility of controlling the porous structure by the ratio and method of mixing and milling. Lampblack and middle temperature pitch (82°C softening point) were compounded at 45:55 mixing ratios, mixed on blade mixers and rollers and graphitized; also, high-temperature pitch (145°C softening point) and lampblack were blended in three non-specified ratios, mixed and reduced on vibration type mixers and graphitized. The distribution of pore volume as a function of pore radius was derived from porosity measurements on a mercury porosimeter at up to 2500 atm. pressure and from isothermal nitrogen adsorption tests. The results indicated

Cord 1/4

L 32075-65

ACCESSION NR: AP5005575

three general types of porous structures, i.e., structures with increased porosity, monolithic structures and carbon black aggregates (see Fig. 1 of the Enclosure); the absence of transient pore systems in monolithic pore structure types; and a specific system of transient pores in carbon black aggregates which causes the high adsorption capacity of such aggregates, although the method of their preparation may differ. The study confirmed the possible control of porous structure by control of compounding and process conditions, which had been established in previous studies. "The authors thank L. V. Luk'yanova for recording the infrared spectrum."
Orig. art. has: 1 table and 4 figures.

ASSOCIATION: None

SUBMITTED: 01Feb63

ENCL: 01

SUB CODE: MT

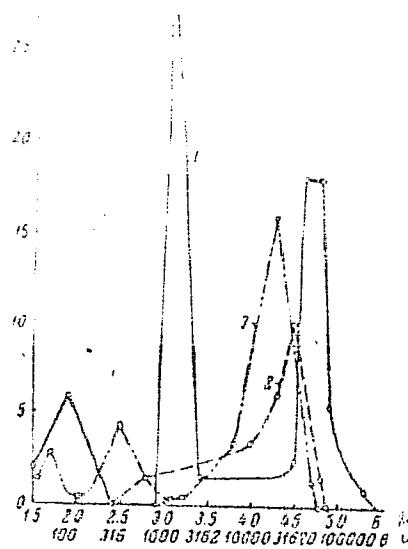
NO REF SOV: 006

OTHER: 001

Card 2/4

L 397-24
ACCESSION NR: AP5005875

ENCLOSURE: 01



Card 3/5

L 32075-65

ACCESSION NR: AP5005575

ENCLOSURE: 01

Figure 1. Differential curves of the distribution of pore volume by radius:
a-differential specific pore volume, ($\Delta V/\Delta \lg r$) $\cdot 10^{-2}$ ($\text{cm}^3/\text{cm} \cdot \text{g}$); b-logarithm
of pore radius; c-pore radius (A_f). Structure: 1-increased porosity, 2-monolithic,
3-carbon black aggregates.

Card 4/4

USSR/Microbiology. General Microbiology

F-1

Abs Jour : Ref. Zhur-Biologiya, No 1, 1957, 437

Author : L. G. Gumilevskaya

Inst : Saratov University

Title : Effect of Ultrasound on Schizosaccharomyces
Acidodevoratus

Orig Pub : Nauchn. ezhegodnik za 1954, g. Saratovsk.
un-t, Saratov 1955, 306-308

Abstract : A generator with a vibration lamp GKE-100
was applied to produce ultrasound waves
(USW). In order to convert the electrical
vibrations into mechanical vibrations
piezo quartz crystals with a cross section
of 22 mm in diameter were utilized. The
sounding was carried out in a glass with
a bottom made from aluminum foil. The

Card 1/3

USSR/Microbiology. General Microbiology

F-1

Abs Jour : Ref. Zhur-Biologiya, No 1, 1957, 487

Abstract : space between the bottom of the glass and the crystal was filled with a thin layer of transformer oil. The sounding (600 hertz in 9½ minutes; 1m hertz in 9½, 12, and 15 minutes; 2 m hertz in 2, 4, 6, 8, and 9½ minutes) was carried out in apple wort containing 10% of sugar and having an acidity of 6.63 to 4.28. Under the influence of the sounding strong morphological changes took place in the fermenting cells: the membranes burst and on some of the cells hollows appeared. Under the influence of USW with a frequency of 600 hertz a partial (up to 45.5%) destruction of the ferments was observed, but fermentation began simultaneously with that of

Card 2/3

USSR/Microbiology. General Microbiology

F-1

Abs Jour : Ref. Zhur-Biologiya, No 1, 1957, 427

Abstract : the control. At the frequency of 1 m hertz almost no cells were left alive; the fermenting properties of the sounded ferments weakened, and the acidity reduction diminished. The best effect was produced by USW with the frequency of 2 m hertz.

Card 3/3

GUMILEVSKAYA, L. G.

✓ Ultrasonic effects on Schizosaccharomyces acidoderivatus. M. F. Chutenko, L. V. Shtremberger, and L. G. Gumilevskaya (State Univ., Saratov). Mikrobiologiya, 33, No. 3 (1964). Irradiation of *S. acidoderivatus* 0.5 min. at 800 ke./sec. killed 43.6% of the cells, and weakened the decarboxylating activity of surviving cells, but caused little loss in fermentation capacity. In 0.6 min. at 1 Mc./sec. only 1.22% of the cells survived, and were seriously weakened in all metabolic activities. In 4 min. at 2 Mc./sec. 28% of the cells survived; in 9.6 min., only 0.02%, and these had impaired activity. Julian R. Smith

BRIL', I.L.; GUMILEVSKAYA, N.I.

Increasing the chemical stability of glass medical instruments and
apparatus. Med.prom. 12 no.2:48-49 P '58. (MIRA 11:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo
instrumentariya i oborudovaniya.
(GLASS) (BOTTLES)

DANIL' CHENKO, Ye.P.; GUMILEVSKAYA, M.I.

Reducing the adhesion of blood to the internal surface of
injection needles. Probl.gemat.i perel.krovi no.5:48-49 '61.
(MIRA 14:9)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta meditsinskogo instrumentariya i oborudovaniya Ministerstva zdravookhraneniya SSSR.

(SILICON) (BLOOD—TRANSFUSION)

DANIL'CHENKO, Ye.P.; GUMILEVSKAYA, M.I.

Decreasing the blood's adherence to injection needles. Lab. delo
8 no.2:55 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskikh
instrumentov i oborudovaniya, Moskva.
(BLOOD EXAMINATION)

DANIL'CHENKO, Ye.P., kand. tekhn. nauk; VLADYCHENSKAYA, V.V., inzh.;
TALIYEVA, L.P.; GUMILEVSKAYA, M.I.

Medical sterilizer made of pyroceramics with a current conducting
film. Stek.iker. 22 no.10:27 0 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskikh
instrumentov i oborudovaniya.

GUMILEVSKAYA, N. A.

Chem Abs.

V.48 25 Jan 54

Biological Chem.

CW

4

(3)

06

PX

✓ Change of the amino acid content of proteins of plastids
the process of life of an organism. N. M. Sisakyan, B. N.
Beringer and N. A. Gumilevskaya. Doklady Akad.
Nauk S.S.R. VI, 807-10 (1953). Zh. Med. 86, 117 (1953).

C.A. 47, 3904c.—In addn. to the previously found 17
amino acids in sugar-beet leucoplast protein (I), an 18th
one is reported, isoleucine. A protein was isolated similarly
from the beet-leaf chloroplasts; this contained 11.9%
N. The protein isolated, as mentioned above, from the
leucoplasts was compared with the protein (II) obtained
by pptn. of an EtOH ext. with Me₂CO; this protein con-
tained 10.3% N. II contains less arginine, leucine and iso-
leucine, threonine, and serine than I; II contains more
lysine and glutamic acid than I. Cystine is almost absent
in II. I behaves as a homogeneous substance in electro-
phoresis; II appears to be a mixt. Examn. of specimens
from plants of different age showed the following. Age has
no effect on aspartic and glutamic acids, alanine, and
arginine in I, but serine, valine, tyrosine, leucine, isoleucine,
and lysine decline, and threonine and cystine rise. Thus,
age appears to effect structural changes in the protein itself.
G. M. Kosolapoff

Gumilevskaya, N. A.

MD ✓ The amino acid composition of the protein of chloroplasts and leucoplasts in plant ontogenesis. N. M. Susikova, E. N. Bezinger, N. A. Gumilevskaya, and N. P. Luk'yanova, (A. N. Bach Mill, Moscow), Akad. Sci. U.S.S.R., Moscow, Biokhimiya 20, 368-76(1955).—Study material consisted of roots and leaves of the sugar beet. Procedures are described for obtaining the plastids and for the prep. and analysis of the proteins. Paper chromatographic methods were extensively employed. A lipoprotein was isolated at various stages of the sugar beet growth, having 4.8-6.7% of lipides depending upon the age of the plant. By means of partition chromatography 18 constituent amino acids were found in this protein: asparagine, glutamine, glycine, alanine, valine, leucine, isoleucine, serine, threonine, tyrosine, phenylalanine, proline, arginine, lysine, cystine, and methionine. In the leucoplastids quant. detns. were made of 13 and in the chloroplastids of 8 amino acids. Characteristic of the isolated plastid proteins is a high content of basic amino acids (arginine, lysine). The oxyamino acids and in some stages of the plant's development the S-comb. amino acid content of the leucoplast protein is also high. The amino acid content of this protein varies with the age of the plant. While the content of serine may be reduced by 6.8%, the content of cystine, threonine, and glycine may be increased by a total of 7.1%, possibly through the interconversion of some of these amino acids. The leucine content of sugar beet roots is notably reduced with age. The content of dicarboxylic amino acids, alanine, and arginine remains unchanged. It is noteworthy that in the chloroplast protein the ergino acids which fluctuate quantitatively were identical with those of the leucoplasts which remained quantitatively const. (aspartic acid, alanine) and vice versa (serine, cystine, glycine). The arginine content of both proteins remained unchanged at all stages of the sugar beet growth.

B. S. Levine

(3)

GUMILEVSKAYA, N.A.

Mak

Changes in the nucleic acids in the process of metamorphosis of the mulberry silkworm. N. M. Sisakyan and N. A. Gumilevskaya (A. N. Bakh Inst. Biochem., Moscow). Zh. Biokh. 21, 810-15 (1950).—Substantial changes in the content of the different forms of P_i of the nucleic acids and of the N-substances in the mulberry silkworm occurred during its metamorphosis, in the pupa stage and in the cavity fluid. In the body of the pupae and in the cavity fluid characteristically intense mineralization of the P_i compounds took place during the period of the most intense histolysis and beginning histogenesis. The nucleic acids increased during the process of metamorphosis in the pupa proper; this increase was considered as the result of the synthesis of deoxyribonucleic acid and a simultaneous loss of ribonucleic acid. During the process of metamorphosis the N of the purine bases increased in the pupae and in the cavity fluids; the protein substances suffered a reduction toward the conclusion of the process of metamorphosis.

B. S. Luria

17(3)

AUTHORS:

Sisakyan, N. M., Corresponding Member, SOV/20-124-5-55/62
AS USSR, Gumilevskaya, N. A.

TITLE:

On the Nucleotide Composition of the Nucleic Acids in the
Silkworm (*Bombyx Mori L.*) (O nukleotidnom sostave nukleinovykh
kislot tutovogo shelkospryada (*Bombyx mori L.*))

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol. 124, Nr 5, pp 1154-1156
(USSR)

ABSTRACT:

The nucleic acid content in *Bombyx mori L.* is considerably changed in the course of metamorphosis (Ref 1). Histolysis and tissue differentiation are accompanied by its increase. The chemical specificity of these acids is expressed among other things by the nature of the ratio between the purine and the pyrimidine bases in the ribonucleic (RNA) and the deoxyribonucleic acid (DNA). The theorem on the specificity of DNA was formulated. Since no considerable differences were observed in the nucleotide composition of the RNA (in toto) of microorganisms, the problem of their specificity remains still unsolved. The authors investigated the composition of the RNA in *Bombyx mori L.* in toto by quantitative paper chromatography and spectrophotometry (according to Ref 10

Card 1/3

On the Nucleotide Composition of the Nucleic Acids
in the Silkworm (*Bombyx Mori L.*)

SOV/20-124-5-55/62

with some modifications). During metamorphosis the following 4 nucleotides could be identified and determined in molar per cents: Guanylic, adenylic, uridylic, and cytidylic acid (Table 1). The RNA investigated shows the general regularities which are characteristic of the native composition of RNA (Ref 7). The number of the 6-keto groups is equal to the number of the 6-amino groups, i.e. the molar content of guanylic + uridylic acid is equal to the content of adenylic + cytidylic acid. On the basis of this general regularity all RN acids may belong only to three types:
a) with a predominant content of guanylic and cytidylic acid as compared with the adenylic and uridylic acid (GC type);
b) tetranucleotide type; c) with predominant content of adenylic and uridylic acid over that of guanylic and cytidylic acid (AU type). The RNA of *Bombyx mori L.* belongs to the AU type in contrast to the RNA of microorganisms (GC type, Ref 5) and remains the same during metamorphosis. The ratio between purines and pyrimidines is not so high as in the RNA of microorganisms. The DNA content is, on the whole, low in *Bombyx mori L.* At present, only eggs taken from

Card 2/3

On the Nucleotide Composition of the Nucleic Acids SOV/20-124-5-55/62
in the Silkworm (*Bombyx Mori* L.)

femal chrysalises were investigated and the per cent content of purines and pyrimidines is determined. Also in this case general regularities in the composition of the native DNA were observed (Ref 3). Further investigations are necessary in order to find the lack or presence of essential differences between the RNA of insects and that of other animals which were found in the present paper. There are 1 figure, 1 table, and 72 references, 3 of which are Soviet.

ASSOCIATION: Institut biokhimii im A. N. Bakha Akademii nauk SSSR
(Institute of Biochemistry imeni A. N. Bakh of the Academy of Sciences USSR)

SUBMITTED: December 22, 1958

Card 3/3